Final

Site-Specific Safety and Health Plan Attachments Range I, Parcel 201(7)

Fort McClellan
Calhoun County, Alabama
EPA ID No. AL7 210 020 562

Fort McClellan Calhoun County, Alabama

Prepared by:

IT Corporation 312 Directors Drive Knoxville, Tennessee 37923

Task Order CK05 Contract No. DACA21-96-D-0018 IT Project No. 774645

February 2001

Revision 1

This Site-Specific Safety and Health Plan must be used in conjunction with the Installation-Wide Safety and Health Plan, Fort McClellan, Alabama.

Site-Specific Safety and Health Plan Attachment Approval Fort McClellan, Calhoun County, Alabama

I have read and approve this site-specific safety and health plan attachment for the Range I, Parcel 201(7) on Pelham Range at Fort McClellan, Alabama, with respect to project hazards, regulatory requirements, and IT Corporation procedures.

| Jeanne Yacoub, PE Project Manager | Date |
|---|------|
| William J. Hetrick Health & Safety Manager | Date |
| Jeff Tarr Site Coordinator | Date |

| Acknowledgements———————————————————————————————————— |
|---|
| The approved version of this site-specific safety and health plan (SSHP) attachment for the Range I, Parcel 201(7) on Pelham Range at Fort McClellan, Alabama, has been provided to the site coordinator. I acknowledge my responsibility to provide the site coordinator with the equipment, materials, and qualified personnel to implement fully all safety requirements in this SSHP attachment. I will formally review this plan with the health and safety staff every 6 months until project completion. |
| Project Manager Date |
| I acknowledge receipt of this SSHP attachment from the project manager, and that it is my responsibility to explain its contents to all site personnel and cause these requirements to be fully implemented. Any change in conditions, scope of work, or other change that might affect worker safety requires me to notify the project manager and the health and safety manager. |

Date

Site Coordinator

Site-Specific Safety and Health Plan Acknowledgement Form

I have been informed of, and will abide by the procedures set forth in, this site-specific safety and health plan attachment for work activities at Range I, Parcel 201(7) on Pelham Range at Fort McClellan, Alabama.

| Printed Name | Signature | Representing | Date |
|--------------|-----------|--------------|------|
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Fort McClellan Gate Hours

| Baltzell Gate | Baltzell Road. |
|---------------|-------------------------------------|
| | Open 24 hours daily, 7 days a week. |

Pelham Range Access Requirements

| Pelham Range | IT personnel will contact the Range Control Office each day access is required to receive an access permit and available areas of entry. See |
|--------------|--|
| | Attachment 1 for Range Control contact for Pelham Range. |

Fort McClellan Project Emergency Contacts

| Range Control Office (Main Post) | (256) 848-6772 |
|---|-----------------------------|
| Fire Department (on post) | 911 |
| Fire Department (off post) | (256) 237-3541 |
| Ambulance (off post) | 911 |
| Regional Medical Center | (256) 235-5121 |
| Military Police (SSG Busch) | (256) 848-5680, 848-4824 |
| DOD Guard Force (Mr. Bolton) | (256) 848-5680, 848-4732 |
| Anniston Police Department | (256) 238-1800 |
| Chemical Agent Emergencies | (256) 895-1598 |
| (Ken Barnett, CEHNC) | cell phone (256) 310-0604 |
| UXO Emergencies | (256) 895-1598 |
| (Ken Barnett, CEHNC) | cell phone (256) 310-0604 |
| UXO Nonemergencies/Reporting Only (Ronald Levy) | (256) 848-3758 |
| Baltzell Gate Guard Shack | (256) 848-5693, 848-3821 |
| National Response Center & Terrorist Hotline | (800) 424-8802 |
| Poison Control Center | (800) 462-0800 |
| EPA Region IV | (404) 562-8725 |
| Ronald Levy, Chief, FTMC Environmental Management | (256) 848-3758 |
| Ellis Pope, U.S. Army Corps of Engineers | (334) 690-3077 |
| Jeanne Yacoub, IT Project Manager | (770) 663-1429 |
| Bill Hetrick, IT H&S Manager(865) 690- | -3211, pager (888) 655-9529 |
| Mike Moore, Fort McClellan Safety Office | (256) 848-5433 |
| Dr. Jerry H. Berke, Health Resources Occupational Physician | (800) 350-4511 |

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List of Acronyms_____

See Attachment 1, List of Abbreviations and Acronyms, of the site-specific field sampling plan attachment contained ion this binder.

1.0 Site Work Plan Summary

Project Objective. The objective of this investigation at Fort McClellan (FTMC), Calhoun County, Alabama is to collect and analyze soil, groundwater, sediment and surface water samples at the Range I, Parcel 201(7) on Pelham Range.

Project Tasks

- X Collect 10 surface and subsurface soil samples
- X Collect 4 groundwater samples
- X Collect 3 surface water samples
- X Collect 3 sediment samples.

Personnel Requirements. Up to 15 employees. See Figure 1-1 for an organization chart.

Note: All personnel on this site shall have received training, informational programs, and medical surveillance as outlined in the installation-wide safety and health plan (SHP) for site investigations at FTMC, and be familiar with the requirements of this site-specific SHP (SSHP).

This SSHP must be used in conjunction with the SHP, FTMC, Alabama.

2.0 Site Characterization and Analysis

2.1 Anticipated Hazards

The activity hazard analysis in Chapter 5.0 contains project-specific practices utilized to reduce or eliminate anticipated site hazards. The activity hazard analysis indicates specific chemical and physical hazards that may be present and encountered during each task from on-site operations. Below each task is a list of hazards and specific actions that will be taken to control the respective hazards. These control measures may include work practice controls, engineering controls, and/or use of appropriate personal protective equipment (PPE). Site control with the use of specific work zones (support zone, contamination reduction zone, and exclusion zone) is addressed in Chapter 7.0 of Appendix A of the IT Corporation (IT), March 2000, *Final Installation-Wide Sampling and Analysis Plan, Fort McClellan, Calhoun County, Alabama*.

Range I, Parcel 201(7), is located within Training Area 10A in the western area of Pelham Range. The exact acreage of Range I is unknown, however, it is estimated to be 0.5 to 1.0 acres. Range I was reported as being used for agent shell taping and area-denial/decontamination exercises from 1963 to 1964. However, there have been accounts that there are two Range I's and the reported agent shell tapping activities likely occurred at the AAD Shell Tapping Area.

Retired personnel report that area-denial/decontamination exercises were held at Range I. Forty one-gallon chemical land mines consisting of Lewisite-filled metal cans were detonated. At the completion of the exercise the area was decontaminated using M3A2 truck mounted decontamination equipment to dispense lime slurry. In October 1991 and April 1992 SAIC conducted a site investigation of Range I, Parcel 201(7). Four shallow soil samples were collected from two locations for field screening and chemical analysis. The soil borings were advanced to a depth of 67 inches below ground surface. Two samples were collected from each boring; one from 9 to 12 inches and one from 60 to 67 inches below ground surface. Neither the laboratory analyzed or field screened samples indicated the presence of HD, GB, or VX or any of the chemical degradation products.

Table 2-1 contains the toxicological properties of chemicals anticipated or to be used at Range I, Parcel 201(7).

The presence of unexploded ordnance (UXO) is suspected at Range I, Parcel 201(7). Procedures contained in the Site Specific UXO Safety Plan shall be followed for all site activities associated with this investigation.

2.2 General Site Information

Location of Site. Range I, Parcel 201(7), is located within Training Area 10A in the western area of Pelham Range.

Duration of Planned Employee Activity. Employee activity duration is anticipated to be less than three weeks.

Site Topography and Size. The exact acreage of Range I is unknown; however, it is estimated to be 0.5 to 1.0 acres. Surface water at the site appears to drain to the southeast towards an unnamed stream that flows southwest to Cane Creek. Local shallow groundwater at the site is often influenced by topography so groundwater direction in the residuum is likely to the south and east towards the unnamed tributary of Cane Creek.

Pathways for Hazardous Substance Dispersion. Possible pathways for hazardous substances in the area are groundwater and soils.

3.0 Personal Protective Equipment

The work activities will begin in the following levels of protection. Also, a completed description of Level D, Modified Level D, and Level C PPE is provided.

| Task | Initial Level of PPE |
|---|----------------------|
| Initial UXO avoidance sweep and equipment staging | Level D |
| Surface soil sampling | Level D |
| Well installation | Modified Level D* |
| Subsurface soil, groundwater, sediment and surface water sampling | Modified Level D* |

^{*}Initial level will be raised to Level C or higher if air monitoring results in the breathing zone (BZ) are greater than action levels.

Level D. The minimal level of protection that will be required of IT personnel at the site will be Level D. The following equipment will be used for Level D protection:

- X Coveralls or work clothing
- X Leather work gloves (when necessary)
- X Steel-toed safety boots
- X Safety glasses
- X Hard hat
- X Hearing protection (when working near/adjacent to operating equipment).

Modified Level D. The following equipment will be used for Level D-Modified protection:

- X Permeable Tyvek, Kleenguard, or its equivalent (Saran-coated tyvek where chemical agents are anticipated)
- X Latex boot covers

- X Nitrile, heavy work, or latex gloves
- X Steel-toed safety boots
- X Safety glasses
- X Hard hat
- X Hearing protection (when working near/adjacent to operating equipment)
- X Escape/egress air supply pack (where chemical agents are suspected).

Note: In addition to modifying Level D PPE, the operator of high-pressure water jetting equipment shall wear metatarsal guards for the legs and feet and a face shield.

Level C. Level C protection will not be used unless air-monitoring data indicate the need for upgrade; however, the equipment shall be readily available on site. The following equipment will be used for Level C protection:

- X National Institute of Occupational Safety and Health/Mine Safety and Health Administration-approved full-face, air-purifying respirators equipped with organic vapor/acid gas cartridge in combination with high-efficiency particulate air filter
- X Hooded, Saran-coated Tyvek, taped at gloves, boots, and respirator
- X Nitrile gloves (outer)
- X Latex or lightweight nitrile gloves (inner)
- X Neoprene steel-toed boots or polyvinyl chloride overbooties/steel-toed safety boots
- X Hard hat
- X Hearing protection (when working near/adjacent to operating equipment)
- X Escape/egress air supply pack (where chemical agents are suspected).

Note: In addition to Level C PPE, the operator of high-pressure water jetting equipment shall wear metatarsal guards for the legs and feet and a face shield.

4.0 Site Monitoring

The environmental contaminants of concern resulting from Range I, Parcel 201(7), are primarily unknown. The investigation by SAIC in October 1991 and April 1992 did not indicate the presence of chemical warfare agents (CWA) or the breakdown components of CWA; however, provisions shall be implemented to protect the workers during intrusive operations. Table 4-1 contains action levels for site monitoring at Range I, Parcel 201(7).

Chemical. Air monitoring will be performed by the site safety and health officer during the performance of ground intrusive operations. A calibrated flame ionization detector (i.e., OVA 128 or equivalent) organic vapor analyzer will be utilized to monitor the sampling locations and BZs to determine if any organic material may be present that would necessitate upgrading of protection level. A calibrated combustible gas/oxygen indicator will be utilized to monitor the work areas and BZs to determine if any combustible/flammable oxygen levels may be present that would necessitate evacuation of the work area. Table 4-2 contains the air monitoring frequency and location for site monitoring at the fenced area at Range J.

Unexploded Ordnance. UXO support for sampling activities are specified in the site-specific UXO safety plan developed for Range I, Parcel 201(7). The UXO specialists will perform UXO avoidance sweeps prior to moving the heavy equipment onto the site. During this operation, UXO on the surface will be detected and marked for avoidance during field operations. Additionally, downhole magnetometer surveys will be performed to detect metal objects in the path of the boring apparatus. The boring location will be moved to avoid subsurface metal objects.

If UXO is encountered, personnel will contact the site manager and UXO specialist immediately. Personnel will evacuate the immediate area and secure it.

5.0 Activity Hazard Analysis

The attached activity hazard analysis (Table 5-1) is provided for the following activities:

- X Initial UXO avoidance sweep and equipment staging.
- X Installation of monitoring wells.
- X Subsurface soil, groundwater, surface water and sediment sampling.

All injuries and illnesses must be immediately reported to the site manager or the site safety and health officer, who will then notify off-site personnel and organizations as necessary.

If hospital care must be provided, the victim shall be treated at Northeast Regional Medical Center. Directions to the hospital are provided in Figure 5-1.

ATTACHMENT 1

PELHAM RANGE EMERGENCY ROUTE AND RANGE CONTROL CONTACT

ATTACHMENT 2 LIST OF ABBREVIATIONS AND ACRONYMS